

Effective July 5, 2006 at 1200 UTC – six new Tropical Cyclone Probabilistic Wind Speed Elements Become Experimental in the National Digital Forecast Database for the CONUS and the 16 pre-defined CONUS subsectors

Effective July 5 2006 at 1200 Coordinated Universal Time (UTC), the NWS will begin providing **Tropical Cyclone Probabilistic Wind Speed Forecast elements** in the [National Digital Forecast Database](#) (NDFD) on an experimental basis. The test will continue through November 30, 2006. These elements will be available for the entire CONUS and the adjacent coastal waters **and** for all 16 of the pre-defined CONUS subsectors (and the adjacent coastal waters). *These elements are not available for Puerto Rico/Virgin Islands; Hawaii; or Guam.* Gridded forecasts for tropical cyclone surface wind speed probabilities will be available through 120 hours at 6 hourly intervals with a 5 kilometer spatial resolution. These forecasts will be provided for three wind speed thresholds: 34, 50, and 64 knots. Two types of wind speed probabilities - cumulative and incremental - will be provided. Therefore, a total of 6 new grids (and graphics) will be available for each applicable domain (see below). Definitions of these elements will be available on the National Hurricane Center website by July 5 at: <http://www.nhc.noaa.gov/aboutnhcprobs.shtml>

Table 1. Tropical Cyclone Probabilistic Wind Speed Elements

New Experimental NDFD Elements – to be implemented July 5, 2006 Refer to TIN 06-37	Filename
one Wind Speeds >34kts (incremental)	DS.tcwsdpdabv34i.bin
one Wind Speeds >34kts (cumulative)	DS.tcwsdpdabv34c.bin
one Wind Speeds >50kts (incremental)	DS.tcwsdpdabv50i.bin
one Wind Speeds >50kts (cumulative)	DS.tcwsdpdabv50c.bin
one Wind Speeds >64kts (incremental)	DS.tcwsdpdabv64i.bin
one Wind Speeds >64kts (cumulative)	DS.tcwsdpdabv64c.bin

Users will be able to [pull these new NDFD experimental elements from the NWS file transfer protocol \(ftp\) server](#) (see also [Access Data via ftp web page](#)) via the Internet or via the Family of Services' Server Access Service in gridded binary (GRIB2) format. Specific information for ftp users regarding this change is provided below. Partners and customers who are interested in accessing one or more of these NDFD elements for one or more domain via ftp may need to update their procedures and/or scripts. A detailed listing of Tropical Prediction Center (TPC) World Meteorological Organization (WMO) communication headings, including the TPC area designator and reference time designators, is online at <http://www.weather.gov/datamgmt/doc/tpc.html>.

These experimental elements will be issued on the 5-km Lambert Conformal AWIPS Grid 227 in GRIB2 format.

These experimental elements will also be available as [NDFD graphical forecasts](#) and via the [NDFD eXtensible Markup Language \(XML\) via web service](#). Those customers can use the same methods they are currently using to acquire these, and other, NDFD elements.

The URLs and procedures for acquiring the *remaining* [experimental and operational NDFD elements](#) via ftp will not change.

NOTE: These new experimental elements will be affected by the implementation scheduled on September 6, 2006 to split all operational and experimental NDFD elements into smaller files. Refer to [TIN06-39](#).

A Product Description Document (PDD) for the experimental NDFD tropical cyclone probabilistic wind speed elements is available online at:
<http://products.weather.gov/PDD/EXPTCWindSpeedProbNDFD.pdf>.

For more information about the NDFD elements and how to access them, refer to the [NDFD Access Data web page](#). Other useful NDFD web pages:

- [TPC Probabilistic Wind Speed Element Definitions](#) (to be activated 7/5/06)
- [NDFD Element Definitions](#)
- [Operational status of all the NDFD elements for all the domains](#)
- [Information on GRIB2 format and a GRIB2 decoder](#)
- 16 pre-defined CONUS subsectors:
 - [.gif images](#) (scroll down a bit)
 - [Flash application](#) (rollover display)

Instructions for FTP Users:

On July 5, 2006 at 1200 UTC, NDFD element files for six Tropical Cyclone Wind Speed Forecast elements in GRIB2 format will be *added* to the appropriate NDFD *experimental* subdirectory for the CONUS and 16 pre-defined CONUS subsectors, as shown below:

1) The National Digital Forecast Database (NDFD) CONUS Mosaic:

On 7/5/06 at 1200 UTC, six Tropical Cyclone Wind Speed Forecast elements (see Table 1 for the 6 filenames) will be added to the NDFD subdirectory for experimental elements for the CONUS:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.conus/>

2) 16 NDFD CONUS Subsectors:

On 7/5/06 at 1200 UTC, six Tropical Cyclone Wind Speed Forecast elements (see Table 1 for the 6 filenames) for the 16 pre-defined CONUS subsectors will be added to each of the following NDFD subdirectories for experimental elements:

a) Pacific Northwest subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.pacnwest/>

b) Pacific Southwest subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.pacswest/>

c) Northern Rockies subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.nrockies/>

d) Central Rockies subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.crrocks/>

e) Southern Rockies subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.srockies/>

f) Northern Plains subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.nplains/>

g) Central Plains subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.crplains/>

h) Southern Plains subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.splains/>

i) Upper Mississippi Valley subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.umissvly/>

j) Central Mississippi Valley subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.crmissvy/>

k) Southern Mississippi Valley subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.smissvly/>

l) Central Great Lakes subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.crglake/>

m) Eastern Great Lakes subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.erglake/>

n) North East subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.neast/>

o) South East subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.seast/>

p) Mid Atlantic subsector:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndfd/AR.midatlan/>